APA045Mu01 5μg
Active Colony Stimulating Factor 2, Granulocyte Macrophage (GMCSF)
Organism Species: Mus musculus (Mouse)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Pro19~Lys141
Tags: Two N-terminal Tags, His-tag and GST-tag
Purity: >92%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: 100mM $NaHCO_3$, 500mM NaCl, pH8.3, containing 0.01% sarcosyl, 5%Trehalose.
Applications: Cell culture; Activity Assays; In vivo assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 5.9
Predicted Molecular Mass: 44.0kDa
Accurate Molecular Mass: 44kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 100mM $NaHCO_3$, 500mM NaCl (pH8.3) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8°C for one month.
Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed.The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

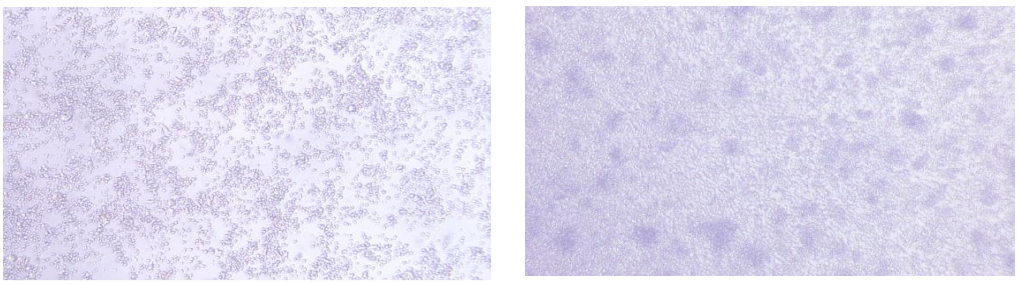
PT RSPITVTRPW KHVEAIKEAL NLLDDMPVTL
NEEVEVVSNE FSFKKLTCVQ TRLKIFEQGL RGNFTKLKGA LNMTASYYQT
YCPPTPETDC ETQVTTYADF IDSLKTFLTD IPFECKKPGQ K

[ACTIVITY]

Measured in a cell proliferation assay using mouse BMDC (bone marrow derived dendritic cells). The ED_{50} (median effective dose) for this effect is less than 0.25 ng/mL.

In-house data of APA045Mu01 used in cellular experiment:

Six-eight weeks old Balb/c mice were used for BMDC. At first, mouse femur and tibia were taken out, and then bone marrow was washed out with serum-free RPMI 1640 medium, followed by centrifugation at 1200RPM for 5min (4ºC). ACK buffer was added to get rid of red blood cells, and then, centrifuged at 1200RPM for 5min (4ºC). Cell pellets were collected and re-suspended, the cells were cultured in DMEM medium supplemented with 10% FBS, or DMEM medium supplemented with 10% FBS and GMCSF (APA045Mu01) at 37ºC with 5% CO_2 in thermostatic incubator. Three days later, cells were observed by microscope, and the result is shown in Figure 1.



A B

Figure 1. Effect of GMCSF on BMDC.

(A) BMDC cultured in DMEM supplemented with 10%FBS;

(B) BMDC cultured in DMEM supplemented with 10%FBS and GMCSF.

[IDENTIFICATION]

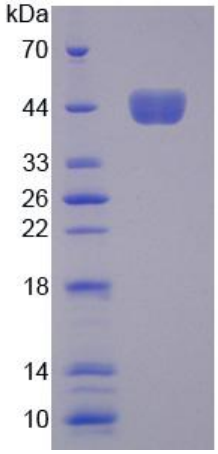


Figure 2. SDS-PAGE

Sample: Active recombinant GMCSF, Mouse

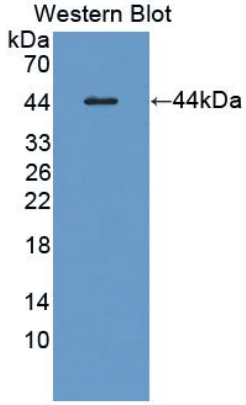


Figure 3. Western Blot

Sample: Recombinant GMCSF, Mouse;

Antibody: Rabbit Anti-Mouse GMCSF Ab (PAA045Mu01)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.